PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: OHTSUKA, Yasunori

7th FL., SHUWA KIOICHO PARK BLDG., 3-6, KIOICHO, CHIYODA-KU, Tokyo 1020094 Japan



WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing (day/month/year)

12. 7. 2005

Applicant's or agent's file reference

P205-0154WO

FOR FURTHER ACTION

See paragraph 2 below

International application No. PCT/JP2005/009820

International filing date (day/month/year)
23.05.2005

Priority date (day/month/year)

27.05.2004

International Patent Classification (IPC) or both national classification and IPC Int.Cl. G06T17/40, G06F3/00, 17/50, H04N13/00

Box No. VII Certain defects in the international application

Box No. VIII Certain observations on the international application

This opinion contains indications relating to the following items:

Applicant

CANON KABUSHIKI KAISHA

| V | Box No. 1 | Basis of the opinion |
|------------|--------------|--|
| | Box No. II | Priority |
| Γ. | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| , I | · Box No. IV | Lack of unity of invention |
| K | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicabilicitations and explanations supporting such statement |
| Г | Box No. VI | Certain documents cited |

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

| Date of completion of this opinion 28.06.2005 | | | | |
|--|------------------------------------|------|------|--|
| Name and mailing address of the ISA/JP | Authorized officer | 5H | 9854 | |
| Japan Patent Office | TAKASHI MURAMATSU | | | |
| 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan | Telephone No. +81-3-3581-1101 Ext. | 3531 | | |

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/009820

| Во | x No. I | Basis of the opinion | | | . | | |
|----|-----------------|--|---|----------------------|-----------------|--------------------|-------------------|
| 1. | | to the language, this opinion | | ed on the basis of | the internation | nal application in | the language in |
| | This o | pinion has been established o | n the basis of a tra e language of a tra | | | - | |
| , | Rules | 12.3 and 23.1(b)). | e migage of a na | isization futilished | tot die puipo | ses of internation | ar scarcii (unuci |
| | | | • | | | • | |
| 2. | | to any nucleotide and/or an | | | international | application and a | necessary to the |
| | a. type of ma | nterial | | | | | |
| | T a | sequence listing | | | | • | |
| | l ta | ble(s) related to the sequence | elisting | | | • | • |
| | b. format of | material | | • | | | |
| | in in | written format | | • | | | |
| | in in | computer readable form | | | | • | |
| | | • | | | | | • |
| | c. time of fill | ing/furnishing | | | | , | • |
| | Γ α | ontained in the international a | pplication as filed. | | • | • | |
| • | | led together with the internati | onal application in | computer readable | e form. | | : |
| | fi. | rnished subsequently to this | Authority for the pu | rposes of search. | | | |
| 3. | In add | lition, in the case that more the | an one version or | conv of a sequence | ce listing and | or table relating | thereto has been |
| | filed o | or furnished, the required state application as filed or does r | ments that the info | rmation in the sub | sequent or ad | ditional copies is | identical to that |
| | | | J , | | -, | | |
| 4. | Additional co | omments: | | • | | | |
| | | • | | | | | |
| | | , | • | | | | ٠, |
| ٠. | · | | | | | | |
| | | | | | | • | • |
| | • | | | | | | |
| | | | | | | · | • |
| | | | | | | | |
| | | | | | | | • |
| | | | | | • | • | |
| | . • | , | | | | | |
| | | | | | | | • |
| | | | | | | | |
| | | | | | | | |
| | | | | | | ٠. | , |
| | | | | | | | |
| | | • | | | | | |

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/009820

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

| citations and explanations supporting such statement | | | | | |
|--|-------------------------------|--------|----------|---|------|
| 1. | Statement | | | : | ٠ |
| | Novelty (N) | Claims | 1-17 | · | YES |
| | | Claims | | | NO |
| ٠ | Inventive step (IS) | Claims | 3 | | YES |
| | | Claims | 1,2,4-17 | | NO |
| | Industrial applicability (IA) | Claims | 1-17 | • | YES |
| | | Claims | | | , ио |
| | • | | | | |

2. Citations and explanations

D1= Yuji SATO, et al., Attention Sharing in MR Community Space -Enhanced Visualization System of User's Indication-, The 6th Virtual Reality Society of Japan Annual Conference, 2001, p.235-238

D2= JP 11-161669 A (Hitachi, Ltd.) 1999.06.18, Full text; all drawings (Family: none)

D3= JP 2003-44868 A (NAMCO LIMITED) 2003.02.14, Full text; all drawings (Family: none)

D4= JP 8-190640 A (Hitachi, Ltd.) 1996.07.23, Full text; all drawings (Family: none)

D5= Masayuki Kanbara, et al., Real-Time Composition of Stereo Images for Mixed Reality, ITE (the Institute of Image Information and Television Engineers) Technical Report, Vol.22, No.33, 1998, P.31-36

The subject matter of claim 1, 2, 4, 8, 11-17 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same.

The technical feature [visualization of attention in the MR space] in D1 and the feature [displaying documents related to the picked parts of a 3D model in the VR space] in D2 are concerned with mutually related technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature in D1 to substitute the feature disclosed in D2.

The subject matter of claim 3 is considered to involve an inventive step over the documents cited in the international search report.

The subject matter of claim 5,6 does not appear to involve an inventive step in view of D1, D2, and D3 cited in the ISR.
D3 discloses [semitransparent objects in the VR space].

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/009820

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V.2

The subject matter of claim 7 does not appear to involve an inventive step in view of D1, D2, and D4 cited in the ISR.

D4 discloses [LOD (level of detail) of information corresponding to the distance].

The subject matter of claim 9,10 does not appear to involve an inventive step in view of D1, D2, and D5 cited in the ISR.

D5 discloses [composed image in which the hand correctly occludes virtual objects].